Amendments to the Claims

1. (Currently Amended) A system for network element fault information processing, the system comprising:

a network management server;

an interior network element, coupled to the network management server;

an edge switch coupled to the interior network element, the interior network element located within a network, wherein the edge switch is a first point of access to the network for communication by a customer;

a trap log resident in the edge switch, wherein the trap log sends an alarm to [[a]] ~~management station~~ the network management server via the interior network element to alert for specified network events;

a first communications link coupled to the interior network element, the first communications link to carry communications to and from a customer via the edge switch;

~~a network management server;~~ and

a computer, the computer coupled to the network management server ~~network element~~, the computer including a processor~~, another trap log~~ and a memory, the memory storing a plurality of instructions to be executed by the processor, the plurality of instructions including instructions to

receive a network element identifier from a user, the network element identifier corresponding to the network element, wherein the network element is a switch, the switch coupled to the network management server, the network management server including network element fault information, and wherein the communications link includes one or more communications circuits;

receive a network element fault information processing instruction;

receive the network element fault information from at least the alarms from the trap log ~~and the another trap log~~;

process the network element fault information for display to the user based at least in part on the received network element fault information processing instruction, wherein the instructions to process the network element fault information include instructions to summarize the identified network element fault information corresponding to a plurality of

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network element faults, the plurality of network element faults comprising transitions to down state, transitions to up state, ~~and~~ frame errors <u>and remainder network faults</u> ; ~~and~~

store the network element fault information into a network fault file wherein the network element fault file contains network element fault information collected over a rolling time period, wherein the rolling time period comprises a previous finite time period wherein the previous finite time period is selected from the group consisting of a plurality of hours, a plurality of days, a week, and a month<u>;</u> and

<u>display in tabular form the identified network element fault information corresponding to the plurality of network element faults over the previous finite time period.</u>

2. (Original) The system of claim 1, wherein the plurality of instructions include instructions to prompt a user to enter the network element identifier.

3. (Original) The system of claim 1, wherein the plurality of instructions include instructions to prompt a user to enter the network element fault information processing instruction.

4. (Original) The system of claim 1, wherein the instructions to receive network element fault information include instructions to query for the network element fault information based at least in part on the received network element identifier.

5. (Original) The system of claim 1, wherein the instructions to process the network element fault information include instructions to identify network element fault information corresponding to one or more network element faults.

6. (Original) The system of claim 5, wherein the instructions to process the network element fault information include instructions to summarize the identified network element fault information corresponding to one or more network element faults.

7. (Original) The system of claim 6, wherein the instructions to process the network element fault information include instructions to determine a number of network element

faults corresponding to one or more chronological periods.

8. (Original) The system of claim 6, wherein the instructions to process the network element fault information include instructions to determine a number of first network element faults and a number of second network element faults, the first network element faults being different from the second network element faults.

9. (Original) The system of claim 1, wherein the network element fault information is associated with one or more of the network element and the communications link.

10. (Original) The system of claim 9, wherein the network element fault information is associated with the communications link.

11. (Original) The system of claim 1, further comprising a server, the server coupled to the network element, the server including the network element fault information.

12-15. (Canceled)

16. (Previously Presented) The system of claim 1 , wherein the instructions to process the network element fault information include instructions to determine a number of first network element faults and a number of second network element faults, the first network element faults being different from the second network element faults.

17-31. (Canceled)

32. (Currently Amended) A method of processing network element fault information, the method comprising:
    receiving a network element identifier from a user, the network element identifier corresponding to a network element;
    receiving network element fault information based at least in part on the received network element identifier;

processing the network element fault information for display to the user based at least in part on a network element fault information processing criteria, wherein the network element fault information processing criteria provides the user with an option to choose between a fixed time period and a rolling time period, wherein the rolling time period comprises a previous finite time period wherein the previous finite time period is selected from the group consisting of a plurality of hours, a plurality of days, a week, and a month; ~~and~~

generating a network element fault data record based at least in part on processing the network element fault information, the network element fault data record including a plurality of data entries, each data entry of at least a subset of the network element fault information including a chronological information field and a network fault indicator field, the chronological information field to store chronological information, the network fault indicator field to store a network fault indicator, wherein the network element fault data record is a buffer file containing network element fault information collected over one of the fixed time period and the rolling time period, and

displaying in tabular form the identified network element fault information corresponding to the plurality of data entries over the previous finite time period.

33. (Original) The method of claim 32, wherein the network fault information processing criteria includes one or more network element fault types.

34. (Original) The method of claim 32, wherein:

the chronological information field is to store a date; and

the network fault indicator field is store a numerical value corresponding to reported occurrences of a network fault.

35-43. (Canceled)